



INFORMATION ASSURANCE INTERNSHIPS

Air Force Research Laboratory
Information Directorate
Rome, New York

1 June – 12 August 2011



The Information Directorate seeks outstanding undergraduate students for paid research internships. The summer 2011 internships focus on the science of mission assurance in a cloud computing environment, with emphasis on assuring Air Force mission essential functions in a contested environment. We invite applications from juniors and seniors in mathematics, computer engineering, electrical engineering, physics and computer science.



THE SCIENCE OF MISSION ASSURANCE

We seek to investigate information assurance at all six phases of the information life cycle:

1. Information generation
2. Information processing
3. Information storage
4. Information transmission
5. Information consumption
6. Information destruction

We aim to develop mathematical representations of critical functions, decompose them into atomic elements, define the relationships among elements, assess fractal properties of subsystems and systems, identify potential vulnerabilities and risks, and develop mitigation strategies for assured operation in a contested environment.

Interns will work on teams with government mentors to research vulnerabilities and threats, participate in facilitated discussions, solve complex problems, present and discuss solutions, and write and submit reports on time.

APPLICATION PROCESS

Candidates who hold US citizenship and qualify for a Department of Defense security clearance may apply by emailing a resume, an unofficial transcript of grades, a 100-word biography and a headshot photo to iast@rl.af.mil no later than 1 December 2010.

REFERENCE

Dr. Kamal Jabbour, ST, "The Science and Technology of Cyber Operations" High Frontier Journal, May 2009, Vol. 5, No. 3, 11-15.